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212.01
221.1

455/235.1

CLAIMS

WHAT IS CLAIMED:

1. In a communications network connecting telephones, a method for transferring telephone calls comprising the steps of:

determining the proximity of a first telephone to a second telephone;

initiating the transfer of calls from the first telephone to the second telephone in response to the proximity; and
receiving the calls on the second telephone.

2. The method of claim 1 wherein the first telephone includes a wireless location receiver and in determining includes determining the proximity of the first telephone to the second telephone using wireless location receiver data.

3. The method of claim 2 in which the wireless location receiver is selected from the group consisting of global positioning satellite (GPS) and short-range positioning beacon receiver.

4. The method of claim 3 wherein the communications network includes a positioning node (PN) and in which determining includes the PN collecting positional data to track the proximity of the first telephone to the second telephone.

5. The method of claim 3 in which the first telephone having a wireless location receiver, and in which determining includes the first telephone collecting positional data to determine its proximity to the second telephone.

6. The method of claim 2 wherein the communication network includes a plurality of base stations and in which determining includes determining the proximity of the first telephone to the second telephone through time-of-arrival measurements made on communications received
5 by the base stations from the first telephone.

7. The method of claim 6 in which determining includes the time-of-arrival proximity tracking being performed by the first telephone, in response to measurements made by the base stations.
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8. The method of claim 6 wherein the communications network includes a positioning node (PN) and in which determining includes the PN performing time-of-arrival calculations, in response to measurements made by the base station.
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9. The method of 2 wherein the first and second telephones include short-range transceivers, and in which determining includes collecting positional data for tracking the proximity of the first telephone to the second telephone through communications between the first and
20 second telephones using the short-range transceivers.

10. The method of claim 9 in which determining includes the short-range transceivers being selected from the group consisting of Bluetooth, infra-red, Home RF, wireless LAN, and radio transceivers.
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11. The method of claim 1 wherein the communications network includes a PN, mobile switching center (MSC), and a base station, in which determining includes the PN tracking the proximity of the first telephone to the second telephone, and in initiating includes the MSC
5 paging the first telephone.

12. The method of claim 11 in which initiating includes the first telephone acknowledging the page, and the MSC automatically initiating the call transfer.

13. The method of claim 11 in which initiating includes the first telephone acknowledging the MSC page, and the first telephone initiating the call transfer.

14. The method of claim 1 in which determining includes the first telephone determining the proximity of itself to the second telephone, and in which initiating includes the first telephone initiating the call transfer using a star feature code.

15. The method of claim 1 wherein the communications network includes (SIM) cards to identify the user of a telephone, and in which initiating includes initiating the call transfer by moving a SIM card from the first telephone to the second telephone, and in which receiving includes transferring a preexisting call from the first telephone to the
25 second telephone.

16. The method of claim 1 wherein the second telephone is selectably enabled, in which initiating includes initiating the call transfer through enabling the second telephone, and in which determining includes determining the proximity of the first telephone to the second telephone after enablement of the second telephone.

17. The method of claim 1 including a further step, following receiving; nullifying the received call.

18. The method of claim 17 wherein the first and second telephones have power supplies, and in which nullifying includes nullifying the call transfer in response to a one or more conditions selected from the group consisting of:

- 1) the elapse of a predetermined amount of time;
- 2) the termination of a call;
- 3) the power supply status of the second telephone;
- 4) the power supply status of the first telephone;
- 5) the radio frequency (RF) coverage enjoyed by the second telephone; and
- 6) the RF coverage enjoyed by the first telephone.

19. The method of claim 1 including authorizing the call transfer prior to receiving.

20. The method of claim 19 wherein each telephone has a non-transferable identification number, and the communications network includes an identification number cross-referenced database of permitted call transfers, and in which authorizing includes authorizing a call transfer in response checking whether the identification number of the first telephone is cross referenced to the identification number of the second telephone.

21. The method of claim 19 wherein the first telephone has a user interface, in which authorizing includes entering a private code into the first telephone user interface to authorize the call transfer.

22. The method of claim 19 wherein the first and second telephones have power supplies, in which authorizing includes authorizing the call transfer in response to one or more conditions selected from the group consisting of:

- 1) the status of the second telephone power supply;
- 2) the status of the first telephone power supply;
- 3) the RF coverage of the second telephone;
- 4) the RF coverage of the first telephone; and
- 5) the wireless cellular capacity.

23. The method of claim 19 wherein the first telephone includes a presentation mechanism, and in which authorization includes presenting the results of the call transfer authorization process to the user of the first telephone.

24. The method of claim 1 wherein the first telephone is a wireless telephone and the second telephone is a automobile mounted wireless telephone, in which determining includes determining that the proximity of the portable telephone to the auto-mounted telephone meets
5 a predetermined threshold.

25. The method of claim 24 wherein the portable telephone includes an embedded wireless location receiver, wherein the auto-mounted telephone includes a port to accept positional data, wherein the
10 automobile includes a wireless location receiver with a port to provide position location data, and in which determining includes the portable telephone collecting positioning data through the embedded wireless location receiver and the auto-mounted telephone accepting position location data from the port of the auto-mounted wireless location receiver.

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26. The method of claim 1 wherein the first telephone is a portable mobile telephone and the second telephone has a predetermined fixed position, in which determining includes determining that the proximity of the portable telephone to the fixed position of the second
20 telephone.

Handwritten notes and a diagram in the top right corner. The diagram shows a central circle with the number '30' inside. Surrounding this central circle are several other circles, each containing a number. These numbers are: 40, 45, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100. The numbers are arranged in a circular pattern around the central circle.

27. The method of claim 1 wherein a plurality of wireless telephones are provided, in which determining includes determining the proximity of the plurality of wireless telephones to the first telephone, and including, preceding initiating:

5 establishing a call transfer priority among the plurality of mobile telephones; and

in which initiating includes initiating the call transfer to the wireless telephone among the plurality of wireless telephones with the highest call transfer priority.

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28. The method of claim 1 wherein the first telephone has a predetermined fixed position and the second telephone is a wireless telephone, in which determining includes determining that the proximity of the portable telephone to the fixed position of the first telephone.

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29. The method of claim 1 wherein the second telephone is a portable mobile telephone and the first telephone is an automobile mounted wireless telephone, in which determining includes determining that the proximity of the portable telephone to the auto-mounted telephone meets a predetermined threshold.

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30. In a communications network connecting telephones, a system for transferring telephone calls comprising:

a first telephone connected to the communications network;

25 a second telephone connected to the communications network; and

a call transfer mechanism for transferring telephone calls from the first telephone to the second telephone in response to proximity of the first telephone to the second telephone.

31. A system as in claim 30 further comprising:

the communications network including a network positioning node (PN) having a port to the communications network to receive information regarding the positions of said first and second telephones, said PN
5 analyzing the position information and performing a proximity determination.

32. The system of claim 31 in which said first telephone is a wireless telephone, wherein:

10 the communications network includes a plurality of base stations connected to said first telephone through a wireless communications link, said plurality of base stations timing the arrival of communications from said first telephone and supplying time-of-arrival data through an operative connection to said PN; and

15 in which said PN performs the proximity determination using the time-of-arrival data.

33. The system of claim 31 in which said first telephone is a wireless telephone with a wireless location receiver selected from the
20 group consisting of global positioning satellite (GPS) and short-range positioning beacon receivers;

in which said first telephone supplies wireless receiver location data to said PN; and

25 in which said PN perform the proximity determination in response the received wireless location data.

34. The system of claim 30 in which said first telephone collects information regarding the position of itself with respect to said second telephone, and in which said first telephone performs the proximity determination based on the collected position information.

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35. The system of claim 34 in which said first telephone is a wireless telephone, wherein:

the communications network includes a plurality of base stations connected to said first telephone through a wireless band communications link, said plurality of base stations timing the arrival of communications from said first telephone and supplying the time-of-arrival data as position information to said first telephone; and

in which said first telephone performs the proximity determination with the time-of-arrival data.

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36. The system of claim 34 in which said first telephone is a wireless telephone, said first telephone further including a wireless location receiver selected from the group consisting of global positioning satellite (GPS) systems and short-range positioning beacon receivers; and

in which said first telephone performs the proximity determination in response to the location data from said wireless receiver.

37. The system of claim 34 in which said first and second telephones each further include a short-range transceiver selected from the group consisting of Bluetooth, infra-red, Home RF, wireless LAN, a wireless radio transceivers; and

in which said first telephone performs the proximity determination in response to short-range transceiver communications between said first and second telephones.

38. The system of claim 30 further comprising:

the communications network includes a mobile switching center (MSC) to accept the proximity determination, said MSC initiating a call transfer from said second telephone, to said first telephone, in response to the proximity determination.

39. The system of claim 38 in which said first and second telephones are wireless telephones having power supplies, said first and second telephones reporting the condition of said power supplies to the communications network;

in which said MSC receives reports on the condition of said first and second telephone power supplies, and in which said MSC includes means to nullify the call transfer, from said second to said first telephone, in response to one or more conditions selected from the group consisting of said first telephone power supply condition, said second telephone power supply condition, the elapse of time since the call transfer was completed, the termination of a transferred call to said first telephone, and radio frequency (RF) coverage of said first and second telephones.

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40. The system of claim 38 in which said first and second telephones have non-transferable identification numbers, wherein:

the communications network includes a database of cross-referenced identification numbers to provide cross-referencing reports;

and in which said MSC accepts cross-referenced identification numbers from said database, said MSC including means to authorize the initiation of the call transfer in response to the cross-referencing reports.

41. The system of claim 40 wherein:
the communications network includes a network node server; and
in which said identification number database is housed in elements
selected from the group consisting of said first telephone, said second
5 telephone, and said network node server.

42. The system of claim 38 in which said first and second
telephones are wireless telephones having power supplies, said first and
second telephone including means for reporting the status of said power
10 supplies to the network; and

in which said MSC includes means for authorizing the initiation of
the call transfer in response to one or more conditions selected from the
group consisting of the condition of said first telephone power supply
status, said second telephone power supply status, the capacity of the
15 wireless cellular, the RF coverage enjoyed by said first telephone, and the
RF coverage enjoyed by said second wireless telephone.

43. The system of claim 30 in which said first telephone further
includes a logic module to accept the proximity determination, said first
20 telephone logic module initiating a call transfer from said second
telephone to said first telephone in response to the proximity
determination.

44. The system of claim 43 in which said first and second telephones are wireless telephones having power supplies, said first and second telephones including means for monitoring the condition of said power supplies;

5 in which said first telephone includes means to nullify the call transfer, from said second to said first telephone, in response to one or more conditions selected from the group consisting of said first telephone power supply condition, said second telephone power supply condition, the elapse of time since the call transfer was completed, the termination of a
10 transferred call to said first telephone, the RF coverage enjoyed by said first telephone, and the RF coverage enjoyed by said second telephone.

45. The system of claim 43 in which said first and second telephones have non-transferable identification numbers, wherein:

15 the communications network including a database of cross-referenced identification numbers to provide cross-referencing reports; and

in which said first telephone accepts cross-referenced identification numbers from said database, said first telephone includes means for
20 authorizing the initiation of the call transfer in response to the cross-referencing reports.

46. The system of claim 45, in which the communications network includes a network node server; and in which said identification
25 number database is housed in elements selected from the group consisting of said first telephone, said second telephone, and said network node server.

47. The system of claim 43 in which said first and second telephones are wireless telephones having power supplies, said first and second telephones including means for monitoring the status of said power supplies, said first telephone including means for authorizing the initiation of the call transfer in response to one or more conditions selected from the group consisting of the condition of said first telephone power supply, the condition of said second telephone power supply, the RF coverage enjoyed by said first telephone, the RF coverage enjoyed by said second telephone, and the capacity of the wireless cellular.

48. The system of claim 43 in which said first telephone, following the proximity determination, initiates the call transfer by registering a star feature code with the network.

49. The system of claim 43 wherein:
the communications network includes a SIM card to identify the user of a telephone; and

in which said first telephone includes means to initiate the call in response to transfer of the SIM card, from said second telephone, to said first telephone.

50. The system of claim 43 in which said first telephone includes a switch to selectably enable said first telephone, and in which said first telephone includes means for initiating the call transfer in response to enabling said switch.

51. The system as in claim 43 in which said first telephone includes means for authorizing the initiation of the call transfer by registering a private code with the network.

52. The system of claim 30 in which said first telephone includes a presentation mechanism; and

in which said presentation mechanism presents the results of the call initiation process to the user of the telephone.

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53. The system of claim 30 further comprising:

a mobile platform;

in which said first telephone is a wireless telephone mounted on said mobile platform; and

10 in which said second telephone is a portable wireless telephone.

54. The system of claim 53 in which said mobile platform includes a wireless location receiver having an output port to supply position data;

15 in which said first telephone has a port connected to said mobile platform wireless location receiver port to accept the position data from said automobile wireless location receiver; and

in which said second telephone includes a wireless location receiver.

20 55. The system of claim 30 in which said first telephone is a portable wireless telephone; and

in which said second telephone has a predetermined fixed location.

56. The system of claim 30 further comprising:

25 a mobile platform;

in which said second telephone is a wireless telephone mounted on said mobile platform; and

in which said first telephone is a portable wireless telephone.

57. The system of claim 30 in which said second telephone is a portable wireless telephone; and
in which said first telephone has a predetermined fixed location.

5 58. The system of claim 30 further comprising:
a plurality of telephones each having a proximity to said second telephone;

a database including a hierarchical transfer priority established between said plurality of telephones; and

10 in which a call transfer is initiated to a telephone, among said plurality of telephones, with the higher transfer priority.